# **EXHIBIT 2**

March 29, 2022

Professor Paul Cassell S.J. Quinney College of Law, University of Utah 383 S. University St. Salt Lake City, UT 84112-0730

Reference: VICTIMS'FAMILIES PROFFER OF FACTS;

Lion Air Flight 610 accident, October 20, 2018, and Ethiopian Airlines Flight 302 accident March 10, 2019

Professor Cassell,

Attached, please find my Expert Witness Report regarding the above referenced matter. This report is based on my review of documents provided by you as well as other documents that are germane to this matter.

Should you have any questions or require additional information or documentation, please do not hesitate to contact me.

Respectfully Submitted,

Christopher H. Keyes Aviation Consultant

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## **I.Qualifications**

My name is Christopher Keyes. I have been a certificated pilot for over fifty years. I hold an Airline Transport Pilot (ATP) certificate with type ratings in five different aircraft. I also hold a Certified Flight Instructor (CFI) certificate with instrument and multiengine ratings. During my career I have accumulated over 8,500 hours of flight time. I have a BS of Aviation and MBA degrees. The first seventeen years of my aviation career I was employed by various aviation organizations as a flight/ground instructor, charter pilot in 14 CFR Part 135 commercial operations, and corporate pilot. I held positions as Chief Flight Instructor, Chief Pilot, Director of Operations, and Check Airman. I was subsequentially employed by the Federal Aviation Administration (FAA) for twenty-four years starting as an Aviation Safety Inspector (ASI). During my career with the FAA I held positions as Manager of Training and Standardization, Manager - Oklahoma FSDO, and Manager - Flight Program Oversight and Safety. Since my retirement from the FAA I have been a contract instructor for the FAA and provide aviation consulting services. A complete listing of my qualifications can be found in Appendix A of this report.

#### II. Charge

I have been asked to conduct a review of several documents for the purpose of providing analysis and opinion regarding the results of the Boeing Company's conspiracy to intentionally withhold critical information to the Federal Aviation Administration (FAA) Flight Standardization Board (FSB) regarding the Maneuvering Characteristics Augmentation System (MCAS) installed on the 737 MAX aircraft.

#### III. Background

Two aircraft suffered catastrophic accidents which resulted in the deaths of 346 passengers and crewmembers. Ethiopian Airlines flight 302 and Lion Air flight 610. A causal factor common to both accidents was the malfunction of the MCAS and the flightcrew's inability to accurately address the emergency situation in a timely manner.

## IV. Analysis

The following analysis (A-F) are based on my educational background (BS, MBA), aeronautical experience over the past fifty years as a pilot (ATP, CFI, Check Airman) and my twenty-four years with the Federal Aviation Administration (FAA) as an aviation safety inspector, FSDO Manager, and safety manager. A complete list of my personal qualifications is presented in Appendix A. A complete list of reference documents is in Appendix B.

#### A. Analysis

The Federal Aviation Administrations (FAA) Flight Standardization Board (FSB) makes the final determination as to the appropriate level of differences training necessary for a new variant of an existing transport category aircraft.t

The Federal Aviation Administration (FAA) has, over the years, established an extensive and comprehensive organizational structure for oversight of the manufacture of transport category aircraft, of which the Boeing 737 Max is one. The FAA's certification processes are well established and have consistently assured the safe design of all aircraft.

The FAA Aircraft Certification Service (AIR) is part of the Office of Aviation Safety (AVS) and is responsible for oversight of design, production, airworthiness certification, and continued airworthiness programs for all U.S. civil aviation products. Within the AIR organization there are several directorates, one of which is the Transport Directorate (ANM-100). The Transport Airplane Directorate was established to maintain or enhance air safety and public service and to standardize the application of airworthiness standards. An aircraft certification directorate has general responsibilities for the initial certification of aircraft, for accepting any significant changes to existing aircraft, for establishing the airworthiness standards of aircraft in operation, and for developing airworthiness directives (AD), as required, and is responsible for continued operational safety by; monitoring the transport category airplane fleet to ensure that airplanes continue to meet regulations and are safe throughout their operational life cycle; watching for conditions that affect the safety of airplanes through surveillance, inspection, review, investigation, and analysis of service difficulties, incidents, and accidents; identifying any unsafe conditions and working with the manufacturer to mandate corrective actions; revising regulations/FAA policy or proposing new regulations and/or policy. ANM-100 has responsibility for the oversight of Boeing.

Within the Transport Directorate resides the Aircraft Certification Office (ACO), the aircraft certification directorate's engineering operational element. The ACO performs aircraft certification duties under the guidance of the aircraft certification directorate. This office administers and secures compliance with agency regulations, programs, standards, and procedures governing the type design of aircraft, aircraft engines, or propellers. It offers certification expertise on investigating and reporting aircraft accidents, incidents, and service difficulties. The ACO administers most type certification and Continuous Airworthiness Program (CAP) activities. They also establish standards and procedures and recommend regulations governing the type design and certification of aircraft, engines, and propellers. An ACO administers follow-on activities related to certification, such as the evaluation and issuance of Supplemental Type Certificates (STC) and the issuance of ADs. An ACO often works directly with manufacturers and is normally located in a region that contains one or more transport aircraft manufacturers.

An Aircraft Evaluation Group (AEG) is a unit of the Flight Standards Service (AFS) and is established to meet FAA's operations and maintenance responsibilities during the type certification (transport aircraft) process. They are usually collocated with and work closely with ACOs. AEGs provide initial operational evaluation of aircraft for AFS approval in the aircraft

certification process. The AEGs advise manufacturers of applicable operational and maintenance requirements during the design and certification process and also make recommendations to Flight Standards about flight training, inspection programs, and flight crew

Following the certification and evaluation of an aircraft, an AEG is involved in monitoring the fleet service experience to help maintain continued airworthiness.

The AEG will establish and manage several Boards to include, the Flight Operations Evaluations Board (FOEB), the Maintenance Review Board (MRB), and the Flight Standardization Board (FSB). The AEG assigns these boards to each make and model (Boeing 737) of large turbojet aircraft. These boards remain in effect until such time as the specific aircraft is no longer being manufactured or is no longer in service. The FSB's primary responsibilities are to determine the requirements for pilot type ratings, to develop minimum training requirements, and to ensure initial flightcrew member competency in accordance with published guidelines. The FSB relies on appropriate test data from the manufacturer in formulating their determinations. Once the determination has been made the information is published in a report – Flight Standardization Board Report (FSBR) - that is sent to the AEG branch manager who approves the FSB report and forwards it to the Air Transportation Division for coordination. After approval, it is to be used by all 737 aircraft operators (foreign and domestic) in the development of their flightcrew training programs and by the principal operations inspector (POI) as guidance in approving those operator training, checking, and currency programs.

The FSB determines the requirement for a pilot type rating for an aircraft make and model (Boeing 737) during certification flight tests. It will also develop training objectives for normal and emergency procedures and maneuvers and reviews flight simulation training device (FSTD) requirements. Again, the FSB relies to a great extent on the data from flight test results provided by the manufacturer. The FSB then publishes recommendations in the FSBR for use by operators and POIs during approval of an operator's training program. In developing training objectives and procedures, the FSB will consider any unique requirements for that aircraft such as the fly-by-wire electronic flight control system and the side-stick controllers.

An FSB will issue an initial FSB Report (FSBR) for each make (Boeing) and model (737) of aircraft that it is responsible for. The FSB is also responsible for the evaluation of variants of the basic make and model (Boeing 737) of aircraft for the purpose of determining the need for, and level of, training needed to adequately address the differences between the basic model and the proposed variant (737 MAX). The FSB will amend the current FSBR to incorporate their recommendations for differences training.

#### B. Analysis

Had the B737 FSB been provided with a complete data set with regards to the Maneuvering Characteristics Augmentation System (MCAS) for the B737 MAX they would have determined that the changes warranted a higher level of differences training involving simulators.

The Flight Standardization Board (FSB) for the Boeing 737 determines the aircraft type rating requirements for both new and modified (variant) models (e.g. Boeing 737-100/-200/-300/-400/etc.) of aircraft that require type ratings. To make these determinations the 737 FSB follows the guidance in Advisory Circular (AC) 120-53B, *Guidance for Conducting and Use of Flight Standardization Board Evaluations*.

In order for the 737 FSB to carry out its responsibilities to evaluate the requirements for differences training for the 737 MAX it was necessary to amend the existing Boeing 737 FSB Report (FSBR). The prime element to be addressed is the Master Differences Requirements (MDR). MDRs are those requirements applicable to pilot training and qualifications that pertain to differences between related aircraft. MDRs are specified by the FSB in terms of the minimum difference levels. MDRs are derived from the Differences Tables and form the basis for an operator to develop their operator difference requirements (ODR). The Differences Tables describe the differences between a pair of related aircraft, and the minimum levels operators must use to conduct differences training and checking of crewmembers. These tables are validated by the FSB.

Difference levels specify FAA requirements proportionate to and corresponding with increasing differences between related aircraft. A range of five difference levels in order of increasing requirements, identified as A through E, are each specified for training and checking. MDRs are specified in terms of difference levels. Difference levels are used to credit knowledge, skills, and abilities applicable to an aircraft for which a pilot is already qualified and current, during initial, transition, or upgrade training for other related aircraft. Operators who conduct mixed fleet flying where credit is sought, will apply difference levels and address all mixed fleet flying requirements to ensure compliance with FAA requirements necessary to ensure safe operations. Difference levels apply when a difference with potential to affect flight safety exists between related aircraft. Differences may also affect knowledge, skills, or abilities required of a pilot. If no differences exist or if differences exist but do not affect knowledge, skills, abilities, or flight safety, then difference levels are not assigned; nor are they applicable to pilot training and qualification. With difference levels A through E apply, each difference level is based on a scale of differences in design features or maneuvers. In assessing the effects of differences, both flight characteristics and procedures are considered, since flight characteristics address handling qualities and performance, while procedures include normal and abnormal/non-normal and emergency items.

A Difference Level of "A" would adequately be addresses through self-instruction.

A Difference Level of "B" would adequately be addressed through aided instruction.

A Difference Level of "C" can only be accomplished through the use of devices that are capable of systems training.

A Difference Level of "D" can only be accomplished with devices capable of performing flight maneuvers in a dynamic real-time environment (Flight Simulator).

A Difference Level of "E" can only be satisfied by the use of a full flight simulator qualified at level C or D,

Training differences levels specified by the FSB represent minimum training requirements.

In order for the FSB to make an accurate determination of the appropriate level of differences training necessary for a 737 NG typed rated pilot to qualify in the 737 MAX, Boeing would have to conduct standardization tests, and in conjunction with the FSB evaluate the results of those tests. The FSB would then formulate proposed minimum training requirements. Boeing would be required to formulate necessary information for training, checking, and currency for the 737 MAX MDR's. Boeing would also be required to identify related aircraft for the proposed MDR table, and formulate any necessary tests to assess difference levels and associated training, checking, and currency requirements for incorporation in the MDR table.

Based on the information that Boeing provided to the FSB, the FSB, following the appropriate guidance in AC 120-53B, made a determination that Level "B" training for the 737 MAX would satisfy the differences training requirements. However, because Boeing made a conscious effort to deceive the FSB (FAA) by withholding critical information regarding the Maneuvering Characteristics Augmentation System (MCAS) on the 737 MAX, the FSB, following applicable guidance, came to the logical conclusion that Level "B" differences training was appropriate. Once it was discovered that Boeing had intentionally and fraudulently omitted critical data regarding the 737 MAX MCAS system, the FSB evaluated the new data, and, once again, using the appropriate guidance in AC 120-53B, made the determination that the changes to the MDR table warranted differences training at the "D" level which will require full simulator training.

## C. Analysis

All operators - domestic and foreign – of B737 MAX depend on the FAA for appropriate and accurate information regarding aircraft that they approve and the training they recommend.

The FSB evaluates data collected/developed by the manufacturer and provided to them for the purpose of making a determination as to what the aircraft type rating requirements will be for both new and modified (variant) models of aircraft that require type ratings. To make these determinations the FSB follows the guidance in Advisory Circular (AC) 120-53B, *Guidance for Conducting and Use of Flight Standardization Board Evaluations*. The FAA then publishes the results of their determinations in a Flight Standardization Board Report (FSBR) applicable to the Boeing 737. This report is available to all 737 operators, both domestic and foreign. For a domestic operator of a 737 the operator is responsible for developing a training program for the specific make and model of aircraft that they operate to include differences training. In order to develop an adequate 737 flight training program, the operator must address the recommendations in the FSBR. Once the operator has completed the development of the appropriate training program's he/she then submits that program to their assigned Principal Operations Inspector (POI) for approval. The POI will use the FSBR for that aircraft to ensure that the proposed training

program changes meet the minimum training requirements set forth in that report. The POI will also ensure that the training program complies with applicable Federal Aviation Regulations (FARS) and provides for a safe operation. The FAA/POI will validate the training program by means of structured surveillance.

Foreign operators of Boeing 737 MAX aircraft are not required to follow the recommendations of the FSBR. However, the FSRB is a logical source document for them to use in the development of their own training programs. This is a single source document that a foreign operator can adopt and message to comply with their applicable Civil Aviation Authority (CAA) training program requirements of their respective countries.

However, given the fact Boeing intentionally defrauded the FAA by submitting incomplete and insufficient data the FSB made the determination that only Level "B" differences training was needed for the 737 MAX. This inaccurate information was published and made available to the world 737 MAX community. That the FAA's training requirements for the 737 MAX did not include Level "D" simulator training "had an incredibly significant cascading effect on the 737 MAX program that undermined the safety of the flying public."

As a result of this fraudulent omission of data by Boeing, flight crews of 737 MAX aircraft did not possess sufficient or adequate training to prepare them to effectively and safely deal with a malfunction of the MCAS. As a result, there were two fatal 737 MAX accidents – Lion Air and Ethiopian Air- which were caused by faulty MCAS and the crews lack of knowledge/training on how to properly deal with the emergency.

## D. Analysis

The act of withholding critical information regarding MCAS rendered the applicable sections of the B737MAX Aircraft Flight Manual and checklists unusable.

The FAA requires that aircraft manufacturers provide an approved Aircraft Flight Manual (AFM) for each aircraft certified after March 1, 1979. Prior to that date, approved flight manuals were required only for transport category airplanes. Proposed AFMs are reviewed by a Flight Manual Review Board (FMRB) and, based on the FMRB's recommendation, are approved by the manager of the applicable Aircraft Certification Office (ACO) when the aircraft is certified. AFMs of transport category airplanes contain three sections, which are the procedures, performance data, and limitation sections. AFMs for complex aircraft contain extensive performance data sections. All performance information necessary to operate the aircraft in revenue operations is in this section. The AFM performance data section of a complex aircraft is typically not suitable for flightcrew use. This section is suitable for use by performance engineers. Therefore, operators of transport category aircraft may develop a condensed version of the AFM, commonly referred to as a Company Flight Manual (CFM). The procedures section of a CFM must contain all procedures required by the AFM for each operation the operator conducts. As a minimum, the operator must include sufficient detail to allow a trained crew to safely and effectively operate the aircraft. The procedures section of the manual may be divided into

subsections such as normal, non-normal, and emergency procedures. If the FAA was provided with insufficient/incomplete/fraudulent data, as was the case with Boeing and the 737 MAX that deficiency was be carried over into the procedures section of the AFM/CFM and insufficiently addressed to provide the flight crews with the data/information to safely operate the aircraft.

When an operator develops a training program it must include ground and flight training specific to each make/model/variant of aircraft that they operate. The training will include each system of the aircraft and cover normal, non-normal (abnormal), and emergency procedures. The AFM serves as a source document for the development of the training curriculums. When Boeing fraudulently omitted the critical information about the MCAS, the FSB made an erroneous determination as to the differences training required. As a result, operators, depending on the FSBR for the 737 MAX to develop the training curriculums, did not include sufficient MCAS information regarding MCAS emergency procedures. Consequentially, 737 MAX flightcrews received incomplete training that left them inadequately prepared to deal with an emergency situation involving the 737 MAX MCAS.

A checklist is a formal list used to identify, schedule, compare, or verify a group of elements or actions. A checklist is used as a visual or oral aid that enables the flightcrew to overcome the limitations of short-term human memory. Although a checklist may be published in a manual, it is designed for independent use so that the flightcrew does not have to reference a cumbersome manual. Checklists are used to ensure that a particular series of specified actions or procedures are accomplished in correct sequence. Aircraft checklists, in particular, are used to verify that the correct aircraft configuration has been established in specified phases of flight. Checklists are traditionally broken down into normal, abnormal, and emergency procedures. Non-normal (or abnormal) and emergency procedures in an AFM are usually presented in more detail than are normal procedures. The steps and the order of steps in these procedures are often critical. Some critical emergency situations do not afford crewmembers the luxury of referring to a checklist for the correct response to the emergency. In such cases the flightcrew is required to take immediate action to address the emergency. An immediate action is an action that must be accomplished so expeditiously (in order to avoid or stabilize a hazardous situation) that time is not available for a crewmember to refer to a manual or checklist. A flightcrew's failure to correctly accomplish all immediate action items can result in a threat to continued safe flight. Crewmembers must be so familiar with these actions that they can perform them correctly and reliably from memory. After the emergency has been brought under control the flight crew will then refer to the appropriate follow-on or cleanup checklist to ensure that they have properly completed all of the memory items.

## E. Analysis

The lack of appropriate or incomplete MCAS training put every crewmember and passenger on board every B737 MAX at an unwarranted risk for a catastrophic event every time they took off.

A flightcrew training program is the cornerstone of a safe, efficient, and successful flight operation. A training program is a system of instruction that includes curricula, facilities, flight

simulation training devices (FSTDs), training equipment, instructors, check pilots, courseware, instructional delivery methods, and testing and checking procedures. This system must satisfy the training and qualification program requirements as prescribed by the operators applicable CAA and ensure that each crewmember remains adequately trained for each aircraft, duty position, and kind of operation in which the person serves. The FAA has extensive regulations and guidelines regarding training for commercial operations.

During training, flightcrew's would cover emergency situations in the ground portion of the training curriculum. The individual emergency situations associated with the various aircraft systems would be introduced, explained, broken down, and the appropriate response discussed. If immediate action was the required response, the steps in that procedure would have been reviewed and committed to memory. The flightcrew would then have the opportunity to practice the emergency procedure to include the application of the memory items when participating in the required flight training (simulator) portion of the training curriculum. This structured training affords the flightcrew's the opportunity to practice any given emergency situation to the point of proficiency.

Both domestic and foreign 737 MAX operators depended on the FSBR for the 737 MAX to build effective training programs to properly train/qualify their 737 MAX flightcrew's to a safe and proficient level that would ensure that they were proficient enough to pass periodic and regulatory proficiency checks.

However, due to Boeing's deception with regards to the 737 MAX MCAS, the FBR differences training recommendations were flawed. Flawed because Boeing chose profit over safety. As a result, there was a cascading effect of this flawed data. AFM's, checklists, training programs (to include simulators) did not adequately address emergency issues associated with MCAS.

As a result, every 737 MAX crewmember lacked the appropriate training on 737 MAC MCAS malfunctions/emergencies. Thus, every time a 737 MAX took off, anywhere in the world, it was piloted by flightcrews that were inadequately trained or qualified to handle a MCAS malfunction. This created an unwarranted and increased exposure for a catastrophic event, which unfortunately occurred on two occasions involving a Lion Air Line and an Ethiopian Airlines with the loss of 346 lives.

#### F. Analysis

The actions of Boeing flies in the face of every principal of aviation safety.

The fraudulent actions on the part of Boeing by withholding critical information from the FAA/FSB regarding the 737 MAX MCAS violated basic aviation principals of safety on several levels.

49 US Code § 44701 states, in part, that the FAA Administrator shall promote safe flight of civil

aircraft in air commerce by prescribing minimum standards in the interest of safety for the construction and performance of aircraft. Further, 49 US Code § 44704 states, in part, the that FAA Administrator shall issue a type certificate for an aircraft when he/she finds that the aircraft is properly designed and manufactured and meets the regulations and minimum standards prescribed under section 44701. The Administrator may also include in a type certificate, terms required in the interest of safety. By falsifying and submitting incomplete and/or misleading data regarding the 737 MAX MCAS, Boeing prevented the FAA from executing its statutory obligation to follow processes and procedures which help prevent deviations from regulatory standards. The FAA views the intentional or reckless deviations from regulatory standards as posing the highest risk to safety

Federal Aviation Regulations (FAR's) prohibit a manufacturer from falsifying reports or records. An additional regulation requires a manufacturer of transport category aircraft to show proof of compliance with the requirements – in part - of aircraft controllability and stability. These regulations were promulgated for the purpose of ensuring the highest quality and safest product possible. Boeing intentionally disregarded/violated those regulations in their quest to keep the sale price of the 737 MAX low and increase marketability. Their actions degraded the quality and safety of the 737 MAX aircraft.

By providing false, misleading, and incomplete information to the FAA/FSB regarding the 737 MAX MCAS, Boeing denied the FSB the opportunity to make an accurate assessment of the differences training that would be required. As a result, the FSB determined that a lower level B of training would be acceptable. Simulator training at level D would not be required. The FSB' determination was reflected in the FSBR for Boeing 737 aircraft. As many aviation entities — foreign and domestic - rely on the FAA FSBR to construct their training programs, checklists, and CFM's, this erroneous information was perpetuated into operator's flight programs world-wide.

Operators of the 737 Max, relying on the information and recommendations provided in the FSBR in the development of their respective training curriculums. Because the information that they relied on was flawed, so were their training curriculums that relied on that information.

An inadequately trained pilot makes for an unsafe pilot. Because of Boeings crimes of omission, lack of complete disclosure, and fraudulent activities, every 737 MAX crewmember was, unintentionally, inadequately trained and not properly equipped to handle an emergency MCAS situation. This fact was emphasized by the fatal accidents of Lion Airlines and Ethiopian Airlines.

#### V. Conclusion and Opinions

It is my opinion, based on my review of the documents provided as well as other applicable documents (Appendix B), that due to Boeings fraudulent omission of the critical information regarding the 737 MAX MCAS that;

1. the FAA 737 FSB was led to an erroneous determination of Level "B" differences

- 2. training for 737 MAX crewmembers; and
- 3. the flightcrew's of Lion Air flight 610 and Ethiopian Airlines flight 302 were not appropriately prepared to deal with the emergency presented to them and were unable to prevent the aircraft from crashing with catastrophic results.

I reserve the right to supplement this report should additional information become available to me.

#### **Appendix A: Professional Qualifications**

## Christopher H. Keyes

**Education:** Bachelor of Science, Aviation – Professional Pilot - 1972

Southeastern Oklahoma State University

Masters of Business Administration – 1979 Southeastern Oklahoma State University

#### **Professional Certificates:**

Airline Transport Pilot Certificate

Flight Instructor Certificate (CFI), Instrument (CFII), Single/Multi Engine (SEL/MEL)

Type Ratings: HS-125, BAE-125, CE-500, BE-300, BE-300F Flight Time: 8,650 hours, 8,500 Pilot in Command (PIC)

## **Professional Experience:**

1972-1979

Flight Instructor, Charter Pilot, Corporate Pilot

1980-1986

Chief Pilot/Director of Operations Corporate Flight Department

1987-2000

Aviation Safety Inspector (ASI), Federal Aviation Administration (FAA). Responsible for;

- Certificating pilots, operators and air carriers.
- Providing oversight of operators, air carriers, and air agencies
- Investigating regulatory violations,
- Conducting aircraft accident investigations.
- Conducting initial HS-125 and BAE-125 (Hawker Aircraft) pilot certification and 14 CFR Part 135 proficiency and enroute checks throughout the United States.

#### 2000-2002

Manager, Training and Standardization Branch, FAA Flight Inspection Program Responsible for the initial and recurrent training, and periodic checking of fifty pilots utilizing thirty-two aircraft (Hawkers, Lear Jets, King Air 200's) in a worldwide 14 CFR Part 135 operation.

2002-2005

Manager, Oklahoma FAA Flight Standards District Office (FSDO) Responsible for all aviation activity within the state of Oklahoma utilizing a work force of thirty operations and airworthiness ASI's. 2005-2011

Manager, FAA National Flight Program Oversight Office Responsible for the oversight of all FAA flight programs the ensure safety of operations and compliance with all applicable regulations and guidance.

#### 2001-2011

Chairman, Interagency Committee for Aviation Policy (ICAP) Safety Standards and Training Subcommittee (SSTS). This was a collateral duty to my FAA assigned position. I was responsible for coordinating with all federal government flight operations/programs to foster safer flight operating practices, adopt best operating practices, develop standardized training programs, conducting safety audits, and assisted flight programs with gaining certification in accordance with the principals of Safety Management Systems (SMS).

2011-2022

Contract Instructor for the FAA Instruct in Air Carrier and Pilot Certification for newly hired ASI's

Aviation Consultant and various certification projects and legal issues.

## **Appendix B: References**

In the course of my analysis', I have reviewed the following documents;

- 1. Final committee Report: The Design, Development, and Certification of the Boeing 737 MAX
- 2. Victims' Families Proffer of Facts
- 3. Republic of Indonesia, Final Aircraft Accident Investigation Report, KNKT.18.10.35.04, Lion Mentari Airlines, Boeing 737 MAX, Flight 610, October 29, 2018.
- 4. The Federal Democratic Republic of Ethiopia, Ministry of Transport, Aircraft Accident Investigation Bureau Interim Report, Ethiopian Airlines, Boeing 737 MAX, Flight 302.
- 5. 49 USC § 44701 General Requirements
  - § 44702 Issuance of Certificates
  - § 44704 Type Certificates, Production Certificates, Airworthiness Certificates, and Production Organization Certificates.
  - § 44743 Pilot Training Requirements
- 6. 14 CFR Part 21 Certification Procedures for Products and Articles
  - Part 25 Airworthiness Standards: Transport Category Airplanes
  - Part 26 Continued Airworthiness and Safety Requirements for Transport Category Airplanes
  - Part 60 Flight Simulator Training Initial and Continuing Qualifications and Use
- 7. FAA Order 2150.3C Federal Aviation Administration Compliance and Enforcement Program
- 8. FAA Order 8000.373B Federal Aviation Administration Compliance Program
- 9. FAA Order 8110.4C *Type Certification*
- 10. FAA Order 8900.1 Flight Standards Information Management System (FSIMS)
- 11. FAA Advisory Circular Advisory Circular (AC) 120-53B Guidance for Conducting and Use of Flight Standardization Board Evaluations
- 12. Flight Standardization Board Report (FSBR), Manufacturer Boeing Company 737
- 13. International Civil Aviation Organization (ICAO), Annex 6 Part 1, Chapter 9, Flight Crewmember Training Programs